

Serial No. 10/068,895
Docket No. 5-071 US-FF
USH.024

AMENDMENTS TO THE DRAWINGS:

The attached annotated sheet of drawings includes changes to Figure 2. Further, a “replacement” sheet incorporating the proposed corrections is submitted herewith. In Figure 2, the typographical errors in elements 14 and 15 have been corrected.

REMARKS

Applicant concurrently files herewith a petition and fee for a one-month extension of time.

Claims 1-2 and 4-19 are all the claims presently pending in the application. Claims 1 and 4-5 have been amended to more particularly define the invention. Claim 3 has been previously withdrawn pursuant to a restriction requirement and is canceled without prejudice or disclaimer. Claims 6-19 have been added to more completely claim the invention.

It is noted that the claim amendments are made only to assure grammatical and idiomatic English and improved form under United States practice, and are not made to distinguish the invention over the prior art or narrow the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1 and 5 stand rejected under 35 U.S.C. §102(b) as being anticipated by Vora et al., U.S. Patent No. 5,819,273. Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Vora et al., in view of Sanada et al., U.S. Patent No. 5,484,245. Claim 4 stands rejected under 35 U.S.C. §103(a) (b) as being unpatentable over Vora et al., in view of De Bellis, U.S. Patent No. 6,760,720.

These rejections are respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

The claimed invention is directed to a database system, a database server, and a method of controlling the operation of a database server.

In one exemplary aspect, as recited in claim 1, the database system includes a database in which data has been stored accessibly, a search device for accessing the database in accordance with an applied search command and searching data that has been stored in the database, a command execution device, to which a command is entered, for applying a search command to the search device in accordance with this entered command, and a first interface for separably and directly connecting, without via a network, the search device and the command execution device.

Another aspect of the invention, as recited in claim 4, is directed toward a database server including a first receiving device for receiving a search command transmitted via a network; a search device for searching the database based upon the search command received by the first receiving device; a first determining device for determining whether the search command, which has been received by the first receiving device, can be transmitted to another database server; a transmitting device for transmitting the received search command to the another database server when it is determined that the received search command can be transmitted to the another database server by the first determining device; a second receiving device for receiving data, which represents search results, transmitted from the another database server in accordance with transmission of the search command to the another database server by the transmitting device; and an output device for outputting, in mutually correlated form, data representing search results obtained by the search by the search device

and data representing search results received by the second receiving device.

In yet another aspect of the invention, as recited in claim 5, the method of controlling operation of a database server including receiving a search command transmitted via a network; searching a database based upon the received search command; determining whether the received search command can be transmitted to another database server; transmitting the received search command to another database server when it is determined that the received search command can be transmitted to another database server; receiving data, which represents search results, transmitted from the another database server in accordance with transmission of the search command to the another database server; and outputting, in mutually correlated form, data representing search results obtained by the search and data representing received search results.

Such features are not taught or suggested by the cited references.

II. THE PRIOR ART REJECTIONS

A. The Vora et al. Reference

The Examiner alleges that the invention, as recited in claims 1 and 5, is anticipated by the Vora et al. reference. However, Applicant respectfully submits that Vora et al. does not teach or suggest each and every element of the invention as claimed.

Vora et al. discloses a method and apparatus for maintaining information in a network of computer systems and for controlling the display of searchable information. (Vora et al. at Abstract)

However, Vora et al. fails to teach or suggest a first interface for separably and

directly connecting, without via a network, the search device and the command execution device, as recited in claim 1.

On the other hand, the invention, as recited in claim 1, includes a first interface for separably and directly, without via a network, connecting the search device and the command execution device. Since the first interface directly connects, without via a network, the search device and the command execution device in such a manner that the two can be separated from each other, the search device connected to the command execution device can be disconnected and a different search device, employing a desired search technique, can be connected to the command execution device. (See Application at page 3, lines 26-28 and page 4, lines 1-8)

As shown to FIG. 1 of Vora et al., the server computer system 9 can communicate with the client computer 33 by the network computer 31. The Internet server 63 is also connected to the network computer 31 via the gateway 61. When the keyword is entered to the client computer 33 by the user, the keyword is given to the server 9 via the network computer 31 and network interface 25. When the search command (keyword) is entered to the server 9, the text document stored in the mass memory 17 is searched by the processor 10. However, in Vora et al., the server 9 is connected to the client computer 33 via the network. Thus, Vora et al. clearly fails to teach or suggest claim 1.

Accordingly, Vora et al., does not teach or suggest each and every element of the claimed invention, as recited in claim 1.

Further, Vora et al. fails to teach or suggest determining whether the received search command can be transmitted to another database server and transmitting the received search

command to another database server when it is determined that the received search command can be transmitted to another database server, as recited in claim 5.

On the other hand, in Vora, et al., the search command is given to the server 9 from the client computer 33, and the search processing is carried out at the server 9. The search command is also given to the Internet server 63 from the server 9 without the determining processing of the claimed invention.

Therefore, Applicant submits that there are elements of the claimed invention defined by independent claims 1 and 5 that are not taught or suggest by Vora et al. Therefore, the Examiner is respectfully requested to withdraw this rejection.

B. The Sanada et al. Reference

The Examiner alleges that Vora et al. would have been combined with Sanada et al. to form the invention of claim 2. However, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Vora et al. discloses a method and apparatus for maintaining information in a network of computer systems and for controlling the display of searchable information. (Vora et al. at Abstract)

Sanada et al. discloses an apparatus for and method of accessing a storage region across a network. The disclosure relates to storage control apparatus with ANSI3T11-standardization fiber channels as an interface with its upper-level or “host” computers, and more particularly to a storage controller device which is employable in a computer system for elimination of unauthorized access attempts upon issuance of a request to access the storage

as sent from a host computer to the storage controller. (Sanada et al. at page 1, lines 1-15)

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teaches or suggests their combination.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

Further, Sanada fails to make up for the deficiencies of Vora et al. described above directed to the first interface.

Moreover, neither Vora et al., nor Sanada et al., nor any combination thereof, teaches or suggests "*a second interface for separably connecting said storage controller and said command execution device,*" as recited in claim 2.

The Examiner admits that Vora et al. does not teach, amongst other features, this feature. Rather, the Examiner attempts to rely on Figure 1 and column 5, lines 35-37 and column 6, lines 1-3 of Sanada et al. to make up for the deficiencies of Vora et al.

Clearly, this feature is not taught or suggested by Sanada et al. In fact, nowhere does the cited figure or the cited passages teach or suggest a second interface for separably connecting said storage controller and said command execution device such that the two

devices can be disconnected and a different storage controller can be connected to the command execution device. (Application at page 4, lines 21-28 and page 5, line 1)

Thus, even assuming arguendo that Sanada et al. may disclose an interface, there is no teaching or suggestion in Sanada et al. that the host computers 10,20,30 and storage controller 40 are separably connected by the interface to permit the substitution of a different storage controller, as in applicant's claimed invention. Indeed, the cited reference does not even recognize the desirability or benefit of providing such a feature. Therefore, Sanada et al. clearly does not make up for the deficiencies of Vora et al.

In light of the above, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of claim 2. Therefore, the Examiner is respectfully requested to withdraw this rejection.

C. The De Bellis Reference

The Examiner alleges that Vora et al. would have been combined with De Bellis et al. to form the invention of claim 4. However, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Vora et al. discloses a method and apparatus for maintaining information in a network of computer systems and for controlling the display of searchable information. (Vora et al. at Abstract)

De Bellis discloses a Sort-on-the-Fly/Search-on-the-Fly search engine that provides intuitive mechanisms for searching databases, allowing a user to access data in the database

without having to know the database structure. (De Bellis at Abstract)

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner.

Moreover, neither Vora et al., nor De Bellis, nor any combination thereof, teaches or suggests “a first determining device for determining whether the search command, which has been received by the first receiving device, can be transmitted to another database server and a transmitting device for transmitting the received search command to said another database server when it is determined that the received search command can be transmitted to said another database server by the first determining device” (emphasis Applicant’s) as recited in claim 4.

In accordance with the present invention, as recited in claims 4 and 5, a search command transmitted via a network is received and a database is searched based upon the received search command, however, if it is determined that the received search command can be transmitted to another database server, the received search command can be transmitted to other database servers as well. (Application at page 7, lines 18-22)

Another database server that receives the search command also conducts a database search to find the relevant data. The data that is found is sent from the server of the other database to the database server that transmitted the search command. Data transmitted from

the server of the other database and found as a result of the search by the other database servers is received by the database server that originally received the search command. The data found by the servers of the other databases is correlated with the data found by the search conducted by the database that received the search command via the network. The correlated data is then output. (Application at page 7, lines 23-28 and page 8, lines 1-7)

The Examiner admits that Vora et al. does not teach “a second receiving device” and relies on Figures 3 and 9, column 4, lines 20-25 and 45-60, and column 9, lines 40-43 of De Bellis to make up for the deficiencies of Vora et al.

However, Applicant respectfully submits that Vora et al. fails to teach or suggest each and every element of the claimed invention as recited in claim 4. Specifically, there is no teaching or suggestion in Vora et al. (or De Bellis) of a first determining device for determining whether the search command can be transmitted to another database server and a transmitting device for transmitting the received search command to another database server. This feature allows for a search can be conducted, not only by a single database server that received the search command, but also by other database servers.

Thus, merely by receiving a single search command, a search can be conducted not only by a single database server that received the search command, but also by other database servers.

On the other hand, in Vora, et al., the search command is given to the server 9 from the client computer 33, and the search processing is carried out at the server 9. The search command is also given to the Internet server 63 from the server 9 without the determining processing of the present invention.

Further, even assuming arguendo that De Bellis discloses a second receiving device, there is no teaching or suggestion in De Bellis of a first determining device and a transmitting device to allow a search to be conducted on the other databases server by receiving a single search command, as in applicant's claimed invention. (Application at page 8, lines 8-11)
Indeed, the cited references do not even recognize the desirability or benefit of providing such a feature. Therefore, De Bellis clearly does not make up for the deficiencies of Vora et al.

Therefore, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

Additionally, there is no teaching or suggestion in any of the cited references, that the search unit that has been connected to the command execution unit can be replaced by another different search unit by virtue of the search interface, as in new dependent claim 6. As such, a search device employing a desired search technique can be readily connected to the command execution device, enabling a search using a different search technique without modifying the existing search and command execution units. In fact, there is no suggestion in any of the cited references as to the desirability or benefit of an interface that separably connects the search device and command execution device.

III. CONCLUSION

The Office Action objects to Figures 2. The attached Request for Approval of Drawing Corrections amends Figures 2 to correct the noted typographical errors.

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The title has been amended to be more indicative of the invention to which the claims pertain and to overcome the Examiner's objection to the title.

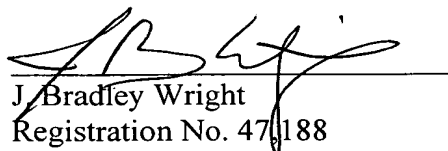
In view of the foregoing, Applicant submits that claims 1-2 and 4-19, all the claims presently pending in the application, are patentably distinct over the prior art of record and are allowable, and that the application is in condition for allowance. Such action would be appreciated.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned attorney at the local telephone number listed below to discuss any other changes deemed necessary for allowance in a telephonic or personal interview.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR §1.136. The Commissioner is authorized to charge any deficiency in fees, including extension of time fees, or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 2/7/05


J. Bradley Wright
Registration No. 47,188

Sean M. McGinn
Registration No. 34,386

McGinn & Gibb, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254

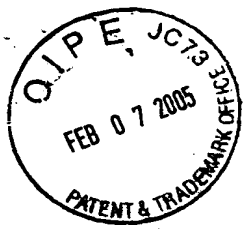


Fig. 2

